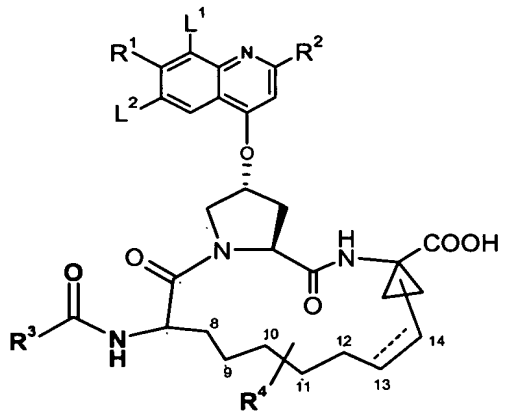
CLAIMS

1. A pharmaceutical composition comprising:

(a) a compound of formula (I):



(I)

wherein:

------ designates an optional bond forming a double bond between positions 13 and 14;

R^1 is H, halo, C_{1-6} alkyl, C_{3-6} cycloalkyl, C_{1-6} haloalkyl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, hydroxy, or $N(R^5)_2$, wherein each R^5 is independently H, C_{1-6} alkyl or C_{3-6} cycloalkyl;

L^1, L^2 are each independently H, halogen, C_{1-4}alkyl, -O-C_{1-4}alkyl, or -S-C_{1-4}alkyl (the sulfur being in any oxidized state);

R^2 is H, halo, C_{1-6} alkyl, C_{3-6} cycloalkyl, C_{1-6} haloalkyl, C_{1-6} thioalkyl , C_{1-6} alkoxy, C_{3-6} cycloalkoxy, C_{2-7} alkoxyalkyl, $C_{6 \text{ or } 10}$ aryl or Het, wherein Het is a five-, six-, or seven-membered saturated or unsaturated heterocycle containing from one to four ring heteroatoms selected from nitrogen, oxygen and sulfur;

said cycloalkyl, aryl or Het being optionally substituted with R^6,

wherein R^6 is H, halo, C_{1-6} alkyl, C_{3-6} cycloalkyl, C_{1-6} alkoxy, C_{3-6} cycloalkoxy, NO_2, $N(R^7)_2$, NH-C(O)-R^7; or NH-C(O)-NH-R^7, wherein each R^7 is independently: H, C_{1-6} alkyl or C_{3-6} cycloalkyl;

or R^6 is NH-C(O)-OR^8 wherein R^8 is C_{1-6} alkyl or C_{3-6} cycloalkyl;

R^3 is R^9O- or R^9NH-, wherein R^9 is C_{1-6}alkyl or C_{3-6}cycloalkyl;

R^4 is H or from one to three substituents on any available carbon atom at positions 8, 9, 10, 11, 12, 13 or 14, said substituent independently selected from the group consisting of: C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} alkoxy, hydroxy, halo, amino, oxo, thio or C_{1-6} thioalkyl;

or a tautomer thereof;

(b) about 0.1 to 10% by weight of a pharmaceutically acceptable amine or a mixture of pharmaceutically acceptable amines;

(c) about 0.1 to 10% by weight of a pharmaceutically acceptable base or a mixture of pharmaceutically acceptable bases;

(d) one or more pharmaceutically acceptable oils;

(e) optionally one or more pharmaceutically acceptable hydrophilic solvents;

(f) optionally one or more pharmaceutically acceptable polymers;
and

(g) optionally one or more pharmaceutically acceptable surfactants.

2. A pharmaceutical composition according to claim 1, wherein the compound of formula (I) is present in an amount of from about 1% to 50% by weight.

3. A pharmaceutical composition according to claim 1, wherein the amine is present in an amount of from about 0.5% to 7% by weight.

4. A pharmaceutical composition according to claim 1, wherein the amine is a C_{1-6} alkylamine, di-(C_{1-6} alkyl)-amine or tri-(C_{1-6} alkyl)-amine, wherein one or more alkyl groups thereof may be optionally substituted by one or more hydroxy groups, or the amine is C_{1-6} alkylenediamine, a basic amino acid or choline hydroxide, or mixtures thereof.

5. A pharmaceutical composition according to claim 1, wherein the amine is selected from ethanolamine, diethanolamine, triethanolamine, tris(hydroxymethyl)aminomethane, ethylenediamine, dimethylaminoethanol, or meglumine, or mixtures thereof.

6. A pharmaceutical composition according to to claim 1, wherein the base is present in an amount of from about 0.1% to 5% by weight.

7. A pharmaceutical composition according to to claim 1, wherein the base is selected from sodium hydroxide, potassium hydroxide, sodium hydrogen carbonate, aluminum hydroxide, magnesium hydroxide, magnesium aluminum hydroxide.

8. A pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable oil is present in an amount of from about 20% to 70% by weight.

9. A pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable oil is selected from: medium or long chain mono-, di- or triglycerides, water insoluble vitamins, fatty acids and mixtures thereof.

10. A pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable oil is selected from: triglycerides of caprylic fatty acids; triglycerides of capric fatty acids; and mixtures thereof.

11. A pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable hydrophilic solvent is selected from propylene glycol, polypropylene glycol, polyethylene glycol, glycerol, ethanol, dimethyl isosorbide,

glycofurol, propylene carbonate, dimethyl acetamide, water, or mixtures thereof.

12. A pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable hydrophilic solvent is selected from propylene glycol, polyethylene glycol, ethanol, water, and mixtures thereof.

13. A pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable polymer is present in an amount of up to about 50% by weight.

14. A pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable polymer is selected from polyethylene glycols, polyvinylpyrrolidones, polyvinylalcohols, cellulose derivatives, polyacrylates, polymethacrylates, sugars, polyols, and mixtures thereof.

15. A pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable surfactant is present in an amount of up to about 70% by weight.

16. A pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable surfactant is selected from d-alpha tocopheryl polyethylene glycol 1000 succinate, polyoxyl castor oils, polysorbates, peglicol 6-oleate, polyoxyethylene stearates, polyglycolyzed glycerides or poloxamers, or sodium lauryl sulfate and mixtures thereof.

17. A pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable surfactant is selected from d-alpha tocopheryl polyethylene glycol 1000 succinate, polyoxyl 40 hydrogenated castor oil, polyoxyl 35 castor oil, polyoxypropylene-polyoxyethylene block copolymer, or sodium lauryl sulfate, and mixtures thereof.

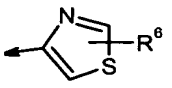
18. A pharmaceutical composition according to claim 1, wherein in the compound of formula (I):

L^1, L^2 are each H.

19. A pharmaceutical composition according to claim 1, wherein in the compound of formula (I):

R^1 is methoxy;

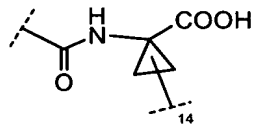
L^1, L^2 are each independently H;

R^2 is  wherein R^6 is NH-(C_{1-4}alkyl) or NH-(C_{3-6}cycloalkyl);

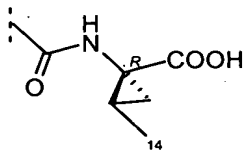
R^3 is R^9O-, wherein R^9 is butyl, cyclobutyl or cyclopentyl;

R^4 is H or C_{1-6} alkyl;

and following moiety:

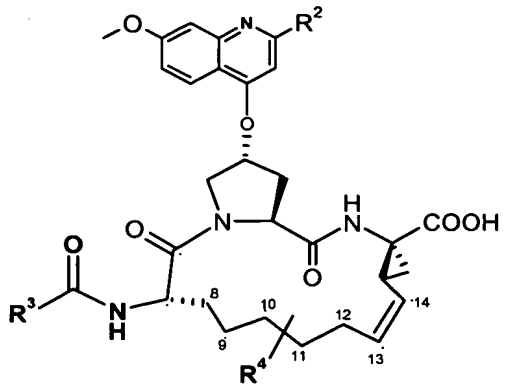


has the configuration represented by the following diastereoisomer:

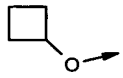
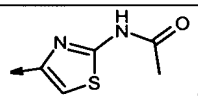
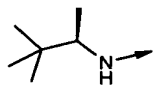
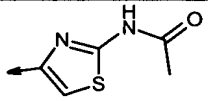
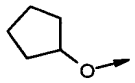
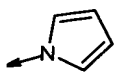
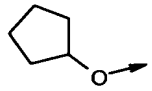
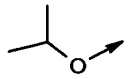
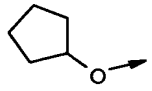
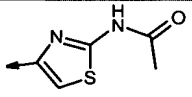
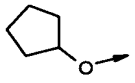
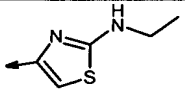
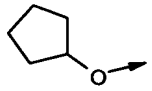
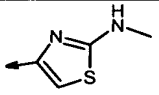


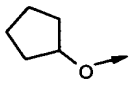
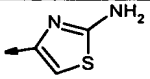
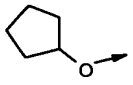
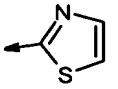
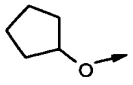
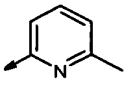
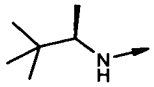
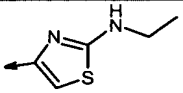
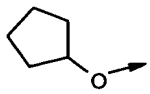
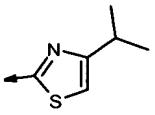
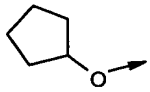
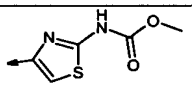
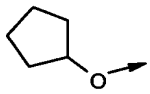
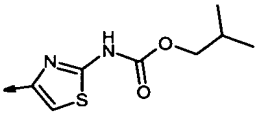
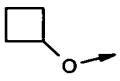
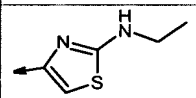
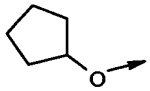
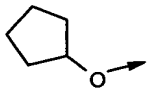
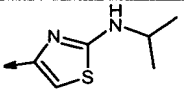
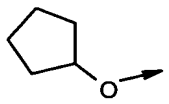
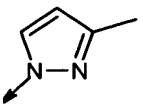
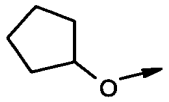
in which configuration position 14 is linked *syn* to the COOH group.

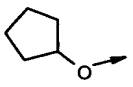
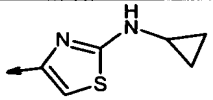
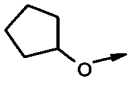
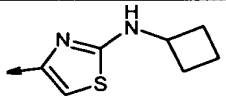
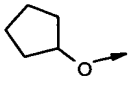
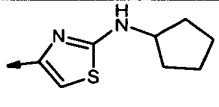
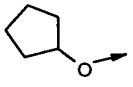
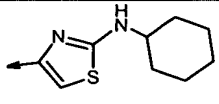
20. A pharmaceutical composition according to claim 1, wherein the compound of formula (I) is selected from the compounds listed in the following table:



wherein the bond from position 14 to the cyclopropyl group is *syn* to the COOH, said 13,14 double bond is *cis*, R^3, R^4 and R^2 are defined as follows:

Cpd #	R^3:	R^4:	R^2:
801		H	 ;
804		H	 ;
805		H	 ;
807		H	OEt;
808		H	OEt;
809		H	 ;
810		H	 ;
811		H	 ;

Cpd #	R^3:	R^4:	R^2:
812		H	 ;
814		H	 ;
815		H	 ;
816		H	 ;
817		H	 ;
818		H	 ;
819		H	 ;
820		H	 ;
821		H	 ;
822		H	 ;
823		H	 ;
824		10- (R) Me	OEt;

Cpd #	R^3:	R^4:	R^2:
825		H	 ;
826		H	 ;
827		H	 ;
and 828		H	 .

21. A pharmaceutical composition according to claim 20, wherein the compound of formula (I) is compound 822.

22. A pharmaceutical composition according to claim 1, comprising:

(a) about 5% to 30% by weight of a compound of formula (I);
(b) about 0.1% to 7% by weight of a pharmaceutically acceptable amine;
(c) about 0.1% to 5% by weight of a pharmaceutically acceptable base;
(d) about 1% to 99% by weight of a pharmaceutically acceptable oil;
(e) up to about 70% by weight of a pharmaceutically acceptable hydrophilic solvent;
(f) optionally up to about 50% by weight of a pharmaceutically acceptable polymer; and
(g) up to about 70% by weight of a pharmaceutically acceptable surfactant.

23. A pharmaceutical composition according to claim 1, comprising:

(a) about 10% to 20% by weight of a compound of formula (I);
(b) about 0.1% to 5% by weight of a pharmaceutically acceptable amine;
(c) about 0.1% to 3% by weight of a pharmaceutically acceptable base;

(d) about 20% to 70% by weight of a pharmaceutically acceptable oil;

(e) about 10% to 30% by weight of a pharmaceutically acceptable hydrophilic solvent;

(f) optionally about 1% to 20% by weight of a pharmaceutically acceptable polymer; and

(g) about 20% to 50% by weight of a pharmaceutically acceptable surfactant.

24. A pharmaceutical composition according to claim 1, comprising:

(a) about 10% to 20% by weight of a compound of formula (I);

(b) about 0.1% to 5% by weight of tris(hydroxymethyl)aminomethane;

(c) about 0.1% to 3% by weight of sodium hydroxide;

(d) about 20% to 70% by weight of a triglyceride of caprylic fatty acid or a triglyceride of capric fatty acid, or mixtures thereof;

(e) about 10% to 30% by weight of a mixture of propylene glycol, ethanol and optionally water;

(f) optionally about 1% to 20% by weight of polyethylene glycol or polyvinylpyrrolidone; and

(g) about 20% to 50% by weight of d-alpha tocopheryl polyethylene glycol 1000 succinate or polyoxyl 35 castor oil (Cremophor EL).

25. A pharmaceutical composition according to claim 1, comprising:

(a) about 10% to 15% by weight of a compound of formula (I);

(b) about 0.1% to 2% by weight of tris(hydroxymethyl)aminomethane;

(c) about 0.1% to 1% by weight of sodium hydroxide;

(d) about 20% to 30% by weight of Capmul MCM or Captex 355;

(e) about 15% to 25% by weight of a mixture of propylene glycol, ethanol and water;

(f) about 40% to 50% by weight of d-alpha tocopheryl polyethylene glycol 1000 succinate; and

(g) about 0.01% to 1% of dl-α-tocopherol.

26. A pharmaceutical composition according to claim 1, in the form of a fluid dosage form selected from a hard shell or softgel capsule or in the form of a solid dosage form selected from a powder, a tablet or a capsule.

27. A pharmaceutical composition according to claim 1, further comprising one or more antioxidants.

28. A method of manufacturing a pharmaceutical composition according to claim 1, said method comprising:

(a) mixing together the pharmaceutically acceptable oil(s), surfactant(s) and solvent(s); (b) dissolving the pharmaceutically acceptable amine(s), base(s) and polymer(s) in the mixture obtained in step (a); (c) optionally heating the mixture obtained in step (b) if necessary to sufficiently melt one or more of the components of the mixture; (d) adding the compound of formula (I) to the mixture obtained in steps (b) or (c) and mixing.

29. A method of inhibiting the replication of hepatitis C virus by exposing the virus to a hepatitis C viral NS3 protease inhibiting amount of the composition according to claim 1.

30. A method of treating a hepatitis C viral infection in a mammal comprising administering to a mammal in need thereof a therapeutically effective amount of the composition according to claim 1.